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## AFRL Rome awards contracts for JAGUAR program

*by Fran Crumb, Information Directorate*

ROME, N.Y. — The Air Force Research Laboratory's Information Directorate has awarded five contracts, with a combined value in excess of \$36.5 million, in support of Joint Air/Ground Operations: Unified, Adaptive Replanning (JAGUAR) program.

The purpose of Defense Advanced Research Projects Agency (DARPA)'s JAGUAR program is to develop technologies that will enhance the capabilities of Air Operations Centers (AOCs) while reducing requirements for manpower.

Receiving awards from the directorate's Contracting Division were:

— The Charles Stark Draper Laboratory Inc., Cambridge, Mass., (\$9,337,937) to create and implement a system design for the JAGUAR program to provide a common information environment for component developers and to integrate the components into a unified software system.

— Lockheed Martin, Advanced Technology Laboratories, 3 Executive Campus, Cherry Hill, N.J., (\$8,000,000) to provide for design and development of a plan understanding and monitoring associate.

— BBNT Solutions LLC, Cambridge, Mass., (\$7,763,343) to develop the capability to update models of assets and procedures that form the primitive elements of plan. This will then allow a supervisor to quickly and accurately install new models into the overall JAGUAR software system.

— ALPHATECH, Inc., Burlington, Mass., (\$7,000,000) for design and development of a plan generator JAGUAR.

— Northrop Grumman of Fairfax, Va., (\$4,539,219) for "Experiment Design and Evaluation" for the entire JAGUAR process.

During the recent conflict in Iraq, the Central Command (CENTCOM) AOC staff was able to plan and conduct upwards of 2000 sorties per day, from dozens of bases, including search, strike, jamming and tanker support — mixing both fixed and relocatable targets with exquisite attention to hundreds of details for each mission.

However, several clear trends are converging that, without a great step forward in automation, may lead to prohibitive deployment, training and logistical needs. These future requirements include more unmanned airborne platforms, increased multi-mission aircraft, more engagements per sortie, richer tactics, battlespace volatility and the need for smaller staffs.

"JAGUAR will address future concerns by uniting technologies for plan generation, plan assessment and model adaptation in a consistent, model-based framework that can respond to the forthcoming transformations in air operations," said Carl A. Defranco Jr., program manager in the directorate's Information Systems Division.

"This framework will be explicitly aligned with Air Force efforts to insert advanced technology into the AOC, to enable rapid transition," Defranco said, adding that a working prototype of the JAGUAR system is expected in early 2008.

The Information Directorate is serving as technical agent for the DARPA Information Exploitation Office, which develops technologies for sensing, exploitation, command/control, and information integration. The office is also responsible for combining selected technologies into network-centric systems that radically improve U.S. capabilities to prosecute ground targets in combat. @